The Bucharest University of Economic Studies

ANNOUNCEMENT

The Bucharest University of Economic Studies organises a selection for the following position:

Experienced researcher - 1 position, for the project *"CauseFinder: Causality in the Era of Big Data and AI and its applications to innovation management"* - 760049/23.05.2023, grant application no. 268/29.11.2022.

Part-time 40 hours/month distributed unequally, gross hourly salary 241.50 lei, fixed period of 12 months with evaluation and possibility of extension until June 30, 2026.

A. To be eligible, candidates must meet the following general and specific conditions:

1. General conditions:

- a) has Romanian citizenship, citizenship of other member states of the European Union, of states belonging to the European Economic Area and/or foreigners as defined by art. 2 letter a) from GEO 194/12.12.2002 with subsequent amendments and additions, respectively persons who do not have Romanian citizenship, citizenship of another EU member state or citizenship of the Swiss Confederation;
- b) has the minimum age regulated by the legal provisions;
- c) has full exercise capacity;
- d) fulfills the conditions of studies and, as the case may be, seniority or other specific conditions according to the requirements of the position;
- e) has not been definitively convicted for committing a crime against humanity, against the state or against the authority, at job or linked to the job, which prevents the administration of justice, forgery or acts of corruption or a crime committed with intent, which would make it incompatible with the exercise of the function, except for the situation in which rehabilitation intervened.

2. Specific conditions:

- a) the level of studies: higher education completed with a PhD degree;
- b) minimum 8 years of experience in scientific research from the completion of doctoral studies, in one of the fields: economics, business administration, cybernetics and statistics, economic informatics, finance or similar;
- c) field of study: economics, business administration, cybernetics and statistics, economic informatics, finance or similar;
- d) other specific conditions:
 - Specific requirements:
 - 1. Solid knowledge of statistics and probability, graph theory, causal modeling, probabilistic reasoning in artificial intelligence, anomaly detection in data mining;
 - 2. Experience in data analysis, statistical and econometric modeling, using Python;

- 3. Good skills in developing and writing scientific papers;
- 4. English language skills at an advanced level;
- 5. Good organisational, communication and collaboration skills with international and multidisciplinary teams.
- Specific responsibilities:
 - 1. Collaboration with the project team to carry out research activities, including reports, studies and scientific articles;
 - 2. Supporting and guiding the research team to create algorithms, code snippets and apply statistical methods to achieve the desired results;
 - 3. Ensuring the quality and correctness of partial and final results;
 - 4. Collaboration with the project team to disseminate the partial and final results;
 - 5. Supporting the project team in achieving the assumed objectives.

B. <u>The selection will consist of:</u>

1. Evaluation of applications;

- **2. Interview**: structured interview (in case of less than 2 applications submitted, the competition committee can decide to simplify the procedure and carry out the selection without conducting the interview stage):
 - *date and time of the interview:* will be communicated simultaneously with the results of the applications evaluation;
 - *place of the interview*: will be communicated simultaneously with the results of the applications evaluation.

The selection steps are eliminatory, the minimum score obtained for each step is 70 points.

C. List of subjects and bibliography:

1. List of subjects:

- 1. Artificial intelligence
- 2. Causal modeling of big data
- 3. Knowledge graphs
- 4. Machine learning
- 5. Explainable artificial intelligence
- 6. The innovation life cycle

2. Bibliography:

- 7. GDELT project. https://www.gdeltproject.org
- 8. Charlie Loyd. "Near-realtime Earth observation resources". https://planet.parts
- Gregor Leban, Blaž Fortuna, Janez Brank, Marko Grobelnik. "Event registry: learning about world events from news". Proceedings of the 23rd International Conference on World Wide Web, Seoul, Korea, 7–11 April 2014, pp. 107–110. http://eventregistry.org/
- 10. Judea Pearl. Causality. Cambridge University Press, 2009.
- 11. Emre Kiciman, Scott Counts, Melissa Gasser. "Using longitudinal social media analysis to understand the effects of early college alcohol use". Proceedings of the Twelfth International Conference on Web and Social Media, ICWSM 2018, Stanford, California, USA, June 25–28, 2018, pp. 171–180.
- 12. William L. Hamilton, Payal Bajaj, Marinka Zitnik, Dan Jurafsky, Jure Leskovec. "Embedding logical queries on knowledge graphs". Va fi publicat în NIPS 2018. https://arxiv.org/abs/1806.01445, accesat în 6 noiembrie 2018.
- 13. Ian Goodfellow, Yoshua Bengio, Aaron Courville. Deep Learning. The MIT Press, 2016.
- 14. Roman, Dumitru, et al. "The euBusinessGraph ontology: A lightweight ontology for harmonizing basic company information." Semantic Web 13.1 (2022): 41-68.
- 15. Gulnes, Maren Parnas, Ahmet Soylu, Dumitru Roman. "A graph-based approach for representing, integrating and analysing neuroscience data: The case of the murine basal ganglia." Data Technologies and Applications (2021).
- 16. Soylu, Ahmet, et al. "TheyBuyForYou platform and knowledge graph: Expanding horizons in public procurement with open linked data." Semantic Web Preprint (2022): 1-27.

D. Contents of the competition file:

- 1. List of all attached documents;
- 2. Application form addressed to the Rector of UES;
- 3. Declaration regarding the existence/non-existence of situations of incompatibility;

4. Declaration on own responsibility if the applicant has / does not have a spouse or relatives and relatives, up to the third degree inclusive, who are employees of the Academy of Economic Studies in Bucharest in a position of management, control, authority with the post selected and neither the post to which he applies, is not in a leadership, control position with the spouse / wife or relative and related, until the third grade inclusive, university employees;

5. Statement for the processing of personal data;

6. Copy of the identity document or any other document certifying the identity, according to the law, if applicable;

7. Copy of marriage certificate or proof of the change of name, if the candidate has changed his/her name (proof of change of name);

8. The criminal record or a statement on his own responsibility that he has no criminal record that makes him incompatible with the position for which he is applying;

9. Medical certificate attesting the appropriate state of health issued no later than 6 months before the selection by the family doctor of the candidate or by the qualified health units, or the declaration on his own responsibility, with the obligation to complete the selection file with the medical certificate not later than the date of the first test of the recruitment and selection process, if applicable;

10. Curriculum Vitae in European format, RO/ENG- signed and dated on each page;

11. Copies of documents certifying the level of studies and other documents certifying the completion of specializations, as well as copies of documents proving that the specific conditions for the position have been met;

12. Other documents relevant to the competition.

E. Contact:

Applications will be submitted until 20.03.2024 at 16:00 EET, at Registratura ASE.

Contact person: Giani Grădinaru – e-mail: giani.gradinaru@csie.ase.ro

F. <u>Calendar of the competition</u>:

No. crt.	Tasks	Date
1.	Submitting the candidates' competition files at the ASE Registrar's Office and verification of the documents in the file	14.03.2024- 20.03.2024
2.	Selection of application files by the members of the competition committee	20.03.2024
3.	Publication of the results of the selection of the application files	21.03.2024
4.	Submission of appeals regarding the results of the selection of application files	22.03.2024
5.	Publication of the results of the appeals	22.03.2024
6.	Interview	25.03.2024
7.	Communication of the results after the interview	25.03.2024
8.	Submission of appeals regarding the interview results	26.03.2024
9.	Publication of the results of the appeal	27.03.2024
10.	Publication of the final results	27.03.2024
11.	Appointment to the position	After approval from the Board of Trustees